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## Kolesar Sees the Promise in All-Digital on AM

Our Excellence in Engineering Award recipient Dave Kolesar is a revitalizer and disruptor

BY PAUL McLANE

The recipient of the Radio World Excellence in Engineering Award for 2019-2020 is Dave Kolesar, CBT, CBNT, senior broadcast engineer at Hubbard Radio. He is recognized

for his initiative in converting AM station WWFD in Frederick, Md., to full-time, all-digital transmission, the first AM station of its kind in the United States, and for advancing our industry's discussion and awareness of the potential uses of the HD Radio MA3 mode.

The FCC in November proposed to allow all U.S. AM band stations to convert to all-digital if they wish, and is taking comments on the idea now. While many people have played a role in advancing voluntary conversion, Kolesar is recognized for advocating within Hubbard for the experiment, which necessitates turning off a station's analog AM signal entirely, and then executing it over sev-

*(continued on page 24)*



Photo by Jim Peck

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## The FCC Explores All-Digital AM

Anticipating voluntary conversions, a new NPRM asks many questions.

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## Radio Gambles on Sports Betting

Early players in this new arena express confidence in the idea

BY JAMES CARELESS

Who would have thought that a Supreme Court decision would spur the growth of a new talk radio format? But that's what appears to be happening since May 2018 when the Supreme Court ended the federal ban on sports betting.

Today, sports betting is legal in 11 U.S. states, according to BusinessInsider.com, while 24 more states have

*(continued on page 6)*



Former Eagles player David Akers and Sean Brace, host of "Daily Ticket," during a pregame show at Xfinity Live. iHeartMedia promotes it as Philly's first daily sports gambling show.

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# NABA Urges North American Radio to Look Ahead

McEwen goes on the road, discussing the association's recent value proposition project

BY DAVIDE MORO

The North American Broadcasters Association wants radio stations to "strongly consider" adopting HD Radio hybrid IBOC mode and to participate in national and international discussions about how migrations to all-digital transmission could work.

The association further hopes that the radio industry will support internet-based content for use by the other type of "hybrid" receivers coming to the market — those that can tune over-the-air broadcasts while also interfacing with the internet.

As Radio World has reported, a paper published this year titled "The Value Proposition of Radio in a Connected World" by a working group of the NABA Radio Committee assessed the North American radio industry and explored major issues facing practitioners in Canada, Mexico and the United States. Topics included IP delivery, connected cars, the role of metadata and issues surrounding digital transmission.

A session at the recent IBC Show in Amsterdam discussed the report further.



A panel discusses radio's future during the IBC Show in Amsterdam. From left, Michael McEwen of NABA, Patrick Hannon of WorldDAB, Graham Dixon of the EBU, Jørn Jensen of NRK, Simon Mason of Arqiva, Andrew Murphy of the BBC, Jordi Gimenez of IRT and Jacqueline Bierhorst of Radioplayer Worldwide.

**ALL DIGITAL**

NABA Director-General Michael McEwen said, "We recommend all radio broadcasters implement a hybrid IBOC broadcast mode and offer station and network content through as many paths as possible, while emphasizing over-the-air content."

McEwen called on the entire industry to jointly define criteria for all-digital migration decisions and to promote regular licenses, rather than experimental ones, for all-digital radio transmission.

In the session, he reviewed recent market research about U.S. listener habits, describing the popularity and healthy status of radio, and momentum for early adopters of a hybrid approach.

A recent Infinite Dial report from Edison Research and Triton Digital, he said, confirms that broadcast radio is by far the favorite audio source in the car, with 81% of U.S. drivers age 18+ listening to "linear" radio emissions, while "owned" digital music scores 45%, CDs 43%, online radio 28%, podcasts 26% and satellite radio 22%.

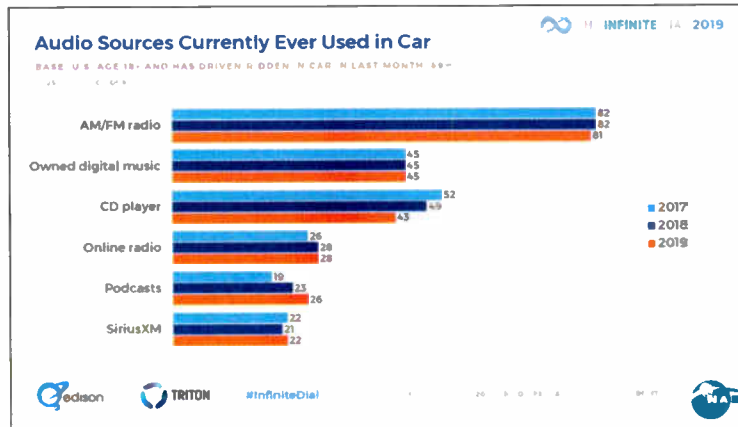
Looking at listening trends, over three years linear radio usage is almost stable, as are owned digital music and satellite radio.

The decline of CD players is evident in that report, with CDs losing about 9 points over two years (from 52% in 2017 to 43% in 2019). Online radio is advancing, if not at an irresistible pace (26% in 2017 to 28% in 2019), as are podcasts, which jumped from 19% two years ago to 26% this year.

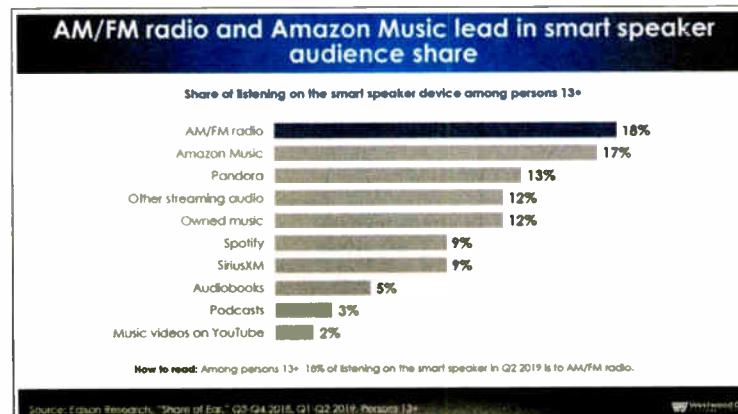
**SOLID FOUNDATION**

The strength of radio's appeal, specifically in cars, is suggested by another report, "Techsurvey 2019" from Jacobs Media. In 2019, 91% of respondents were listening to AM/FM radio for more than 1 hour per day. (Techsurvey gathers data from a pool of radio listeners, so

(continued on page 12)



Broadcast radio remains the most popular audio source in U.S. cars. The slide is from the "Infinite Dial" report by Edison Research and Triton Digital.



Listening to AM/FM stations is the most popular activity people ask their smart speakers for. The graphic is from Edison Research's "Share of Ear" via Westwood One.

# FCC Takes Your Questions on AM All-Digital

Commission tentatively plans to allow optional conversion; NPRM seeks comments

BY PAUL McLANE

The FCC tentatively plans to allow AM stations in the United States to convert their transmissions to all-digital on a voluntary basis, using the MA3 mode of HD Radio. The five commissioners in November unanimously approved a Notice of Proposed Rulemaking that proposes technical standards for all-digital AMs, including adoption of the NRSC-5-D Standard, and asks for comment on the impact of all-digital operations on analog stations and listeners.

The proceeding was prompted by a petition in March from Bryan Broadcasting Corp., as RW has reported.

## MANY QUESTIONS

Below are highlights of the 33-page NPRM. At press time the final text had not been published, but details had been published before the FCC vote (see <https://tinyurl.com/rw-am4>) and were not expected to change in substance.

The NPRM opens with background about the state of AM and its various challenges; the benefits of digital transmission; and the history of in-band on-channel technology including the hybrid (MA1) service mode.

It then described technical testing by NAB Labs (now Pilot), noting that field testing found that all-digital transmission resulted in a clearer, more robust signal, with greater daytime coverage than a hybrid signal, but that lab testing raised concerns about possible co-channel interference and the ability of all-digital signals using standard transmission equipment to stay within the HD Radio emissions mask.

The NPRM then detailed the experience of Hubbard Radio's WWFD(AM) in Frederick, Md., which operates MA3 full-time under an experimental license. It noted that Hubbard experienced significant improvement in audio quality and signal robustness in the all-digital mode, but that its facilities first had to undergo considerable upgrades, and that the station continues to experience transmission issues that limit all-digital capa-

bilities, such as the ability to transmit song and artist visual metadata.

The FCC then set out a list of areas it wants to hear comments about.

Regarding the predicted benefits of all-digital AM broadcasting, it asks dozens of questions about improved audio quality, auxiliary data, improved useable signal coverage, increased programming choices (such as music) and energy and spectrum efficiency.

It also asked for comment on potential interference, including adjacent-channel, co-channel, digital-to-digital and nighttime interference.

It set out proposed operating standards, including power limits, emissions mask requirements, a new carrier frequency tolerance standard, a notification requirement for stations converting to all-digital and EAS requirements, and asked for comments on all of that.

It further wants to know about the costs of conversion for AM licensees, the readiness of the public to transition to all-digital reception and the rule changes needed to implement the proposal.

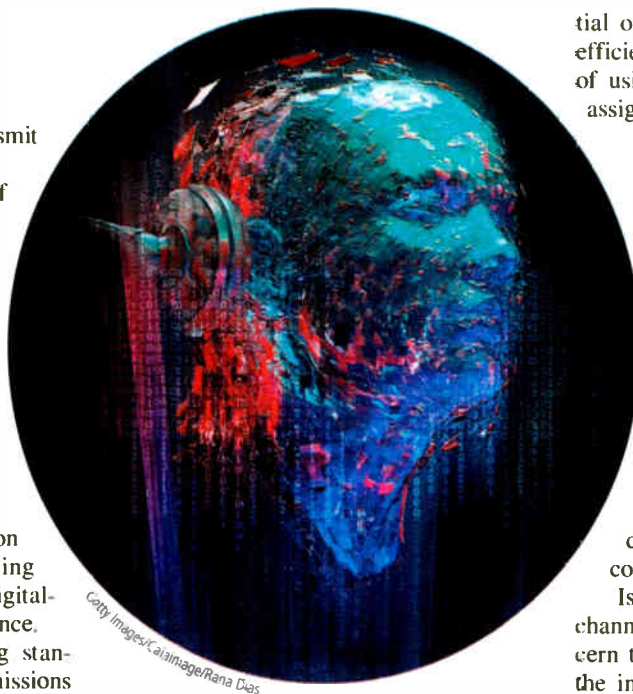
## SOME SPECIFICS

Specifically about the potential benefits, the FCC tentatively concluded that all-digital operation would improve the audio quality of AM broadcasts. "Compared to hybrid mode, all of the modulated transmitter power is dedicated to the digital carriers, in theory resulting in a significantly more robust reception even in the presence of a stronger analog co-channel signal."

But it listed some qualifications — for instance, that NAB Labs had reported some interference from bridges and power lines that caused the all-digital signal to drop out, and one instance of apparent nighttime interference to all-digital reception from first-adjacent stations operating in hybrid mode.

So it asked for input on numerous questions around signal quality, such as whether all-digital operation would provide listenable signals at relatively low signal strength levels or at the outer listenable fringes of the all-digital signal coverage, particularly where a co-channel signal is encountered. It asked about the reception capability of digital receivers over analog, as well as the impact of power lines and other potential noise sources.

Regarding the work by NAB Labs



work and the reports from WWFD, the FCC said that this research "confirms the overall value and feasibility of all-digital broadcasting" but noted that those results have not been evaluated by the National Radio Systems Committee. And it asked whether certain areas need more research, including RF mask compliance, the effects of noise on all-digital coverage area and potential co-channel and adjacent-channel interference.

The NPRM then digs into other areas over 33 pages. Here's just a sampling:

**Auxiliary data** — Backers say all-digital will let AMs provide services like stereo audio, song and artist ID, and emergency notifications with text and images. The FCC asked, among other things, whether it should allow flexibility regarding the use of additional channel capacity as it does with hybrid stations, and specifically whether there's potential in the AM service for future multicast channels.

**Signal coverage** — Do people agree with the FCC that based on available evidence, an all-digital signal offers the potential of greater useable signal coverage than analog or hybrid? The commission also asked whether it should monitor that a station's digital coverage corresponds to its previous analog coverage, and if not, what it should do.

**Energy efficiency** — Will all-digital operation offer greater energy efficiency and utility cost savings for AM broadcasters?

**Spectrum efficiency** — Will all-digital operation help realize the full poten-

tial of digital technology for spectrum efficiency? What are the implications of using current 20 kHz AM channel assignments in all-digital mode?

**Interference** — The NPRM's many questions around interference include whether the existing framework for interference protection is sufficient, or whether there are concerns unique to all-digital that should be accounted for in rules governing groundwave and skywave protection of AM stations.

Will all-digital cause interference to co- and adjacent-channel analog stations? Shouldn't all-digital present fewer interference concerns than hybrid mode?

Is the FCC right in thinking that co-channel interference is more of a concern than adjacent-channel? What does the industry think of existing research about the potential impact of all-digital signals on co-channel analog stations, in and outside their protected contours?

The FCC noted that when it first authorized nighttime operation for AM stations, it had stated that "the benefits of full-time IBOC operation by AM stations outweigh the slightly increased risk of interference ..." The FCC asked whether that earlier reasoning applies to the potential for co-channel interference as a result of all-digital operation.

How might the likelihood of co-channel interference from all-digital stations be minimized; and how should the FCC resolve impermissible interference if it occurs?

What about digital-to-digital interference? Is it true that if all AM stations were digital, co-channel interference would be less, thus potentially increasing groundwave coverage for a given power level and carrier frequency? If the all-digital mode increases the power and bandwidth occupancy of the digital carriers, how might this affect adjacent-channel digital transmissions? What would be the impact of all-digital stations on hybrid ones?

**Nighttime operations** — Should the FCC allow AM all-digital at night, given that propagation characteristics vary markedly between daytime and nighttime? How would all-digital affect potential interference caused by skywave propagation? What additional study and testing might be needed?

**Receivers and consumers** — Are consumers ready? Is 55 million HD Radio-equipped cars a sufficient number? Are non-car receivers readily available and affordable? How many HD

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Radio receivers sold in the past are still in operation?

The FCC also wants to know about the impact of all-digital on listeners with analog-only receivers. "What is the estimated size of this audience, and their estimated frequency of use of such receivers? In a market with very few stations, a single station's conversion to all-digital could reduce options for analog-only listeners." Should the FCC require a station converting to all-digital to show that it is not the only full-service aural service within its community of license county? Would preserving the long-term

economic viability of an AM station and the public benefit of improved service to some listeners justify the present-day loss of service to other listeners? Should the FCC require a converting station to notify its listeners, and in what way?

The NPRM also includes discussion about operating rules; emissions mask compliance (with the FCC noting that "the NRSC has not evaluated it and NAB Labs testing indicated that all-digital stations might have difficulty complying with it"); how signal power should be measured; what carrier fre-

quency tolerance standard to adopt; the impact on EAS and TIS/HAR operations; the likely costs to station of converting; and other factors that might encourage more widespread adoption of all-digital broadcasting within the AM service.

The final NPRM text had not been published at press time, and comment deadlines were not yet set. The first deadline would be in or after late January. Search for "All-Digital AM Broadcasting Revitalization of the AM Radio Service" in MB Dockets No. 19-311 and 13-249.

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# BETTING

(continued from page 1)

legalization legislation pending. In line with this trend, iHeartMedia station WDAS(AM) in Philadelphia relaunched as “Fox Sports Radio — The Gambler” in August 2019. The station now features a mix of sports talk and betting content. (Previously WDAS was “Breakthrough Radio,” in partnership with the Children’s Hospital of Philadelphia offering variety hits and health features.)

“The legalization of sports gambling is happening all over the country and the numbers are only increasing. Folks want to have fun, throw a couple dollars on a game and be entertained,” said Sean Brace, program director/afternoon host at The Gambler, and former host on local sports station 97.5 The Fanatic.

“Our goal at the Gambler is to give the right information — the stuff that is important to a gambler — all while be entertaining.”

The Gambler isn’t the first U.S. radio station to adopt the sports betting format. That honor goes to Longport Media’s WBSS(AM) in Atlantic City, which relaunched as “AM 1490, Sports Betting Radio” earlier in August. Unlike The Gambler, Sports Betting Radio is hardcore: It offers around-the-clock sports betting talk.



**Brent Musberger is host with the Vegas Stats & Information Network (VSiN), a streaming network founded by his nephew Brian. VSiN content is carried on the BetR Network.**

“We are very proud that our AM 1490 Sports Betting Radio is the nation’s very first terrestrial radio station devoted to sports betting 24 hours a day,” said Paul Kelly, Longport Media’s president/general manager.

“It’s exciting to see more stations beginning to follow suit with people realizing just how big sports betting is around the country, even in markets where it’s not legalized.” (Note: Sports betting is legal in Pennsylvania and New Jersey, ensuring that both stations are operating within the law.)

## WHAT’S ON AIR

Although The Gambler does offer sports betting information, its format is still anchored on the sports talk format. And given that the station is branded as “Fox Sports Radio” first, it does rely on that network’s talent.

“Right now, our content is a solid mix of national voices — Dan Patrick and Colin Cowherd from Fox Sports — and my show ‘Daily Ticket with Sean Brace,’ from 3 to 6 p.m., Monday to Friday,” said Brace, whose show mixes betting information with sports talk.

“RJ Bell’s ‘Straight Outta Vegas’ is on right after my show, so for four straight hours you get the latest



**“The Gambler” airs “It’s a Hard Rock Life” on Friday evenings from the Hard Rock Cafe in Atlantic City. Shown is Hard Rock President Joe Lupu with host Jerrold Colton.**

line movement, odds and pertinent information at the perfect time. Most games go off at 7 p.m. on the East Coast, so we have you covered right up until kickoff.”

At AM 1490 Sports Betting Radio, it’s all betting talk; all the time.

“Our station partners with Gow Media’s new BetR Network that launched in August, and their programming is unmatched in terms of the knowledge and sports betting acumen of the hosts,” said Kelly. “I believe our product is better not only for sports bettors but for sports fans in general, because our hosts actually talk about the games and the players and what’s happening on the field, instead of the nonsense you hear on typical sports talk stations these days.”

When Sports Betting Radio launched, all of its content came from the BetR Network, with plans to expand its own content.

“We’re now beginning to add local programming as well so we can put more of a focus on the local teams and have more local listener interaction,” Kelly said earlier this fall. “It also allows us to get out and take the station to the people with live on-location broadcasts.”

## REVENUE OVER RATINGS?

Jason Barrett is president of Barrett Sports Media, a sports radio consultancy in New York. “I think The Gambler chose a great lane to establish itself because WIP and The Fanatic are already well-established successful sports talk brands in this market,” said Barrett.

“However, they’re going to need more than a catchy name, one afternoon show and one national sports betting show if they want to own that identity. The path they’re taking won’t likely produce big ratings, but it should serve them well from a revenue standpoint.”

Barrett’s assessment was echoed by Don Kollins, president/CEO of DK Media, a radio consulting firm in San Francisco. “I like the idea of a sports format such as The Gambler: I see a real opportunity to stand out in the mix of others,” he said. “Of course, the station will need to be entertaining and engaging; giving the listeners the ‘goods,’ so to speak, and celebrating the wins. But all in all I salute the company for thinking out of the box.”

Jason Barrett is bullish about the sports betting radio format in general. In fact, a large number of groups are in a rush to own a strong position in the space because there’s a feeling of it being an area where brands will be able to reap the rewards financially through advertising, events and direct-to-consumer subscriptions, he said.

Meanwhile, although the sports betting radio format is new, betting information on radio is not.



“Currently, Fox Sports, NBC Sports, ESPN, VSiN, The Action Network, RADIO.com, Bleacher Report, The Ringer, SiriusXM and Barstool Sports offer content that focuses on sports gambling,” said Barrett. “It may be a niche space that won’t appeal to the entire audience, but those who do listen are people who potentially are more valuable because of their willingness to part ways with dollars.”

This last point is echoed by Longport Media’s Paul Kelly. “The sports betting format makes a lot of sense for pretty much any business looking to target men with disposable income,” he said. “You don’t need to be a sports betting business to advertise on this format any more than you need to be a music shop to advertise on top 40 radio.”

According to Kelly, roughly 70% of sports bettors are men, and the overwhelming majority of them are in the “money” 25–54 demographic.

“Sports bettors are also twice as likely to make more than \$100,000 per year than the average person, so this is a very sellable demographic for radio,” he said. “According to the American Gaming Association, nearly 40% of adult Americans, about 100 million people, are either current or potential future sports bettors. That’s 40% of a market’s cume that’s potentially interested in this format.”

## RESULTS TO DATE

These are early days for sports betting content on U.S. radio but early results appear promising.

At AM 1490 Sports Betting Radio, “so far, so good,” said Paul Kelly. “The product is entertaining and very informative at the same time and people seem to be genuinely enjoying it. We’ve been able to generate instant results for those advertisers in the sports betting industry since our format is so targeted to exactly the people they’re trying to reach.”

Over at the Fox Sports Radio — The Gambler, “It’s way too early to look at any data or numbers but the show is going really well,” said Sean Brace. “Our pregame show, ‘Live with Eagles Hall of Famer David Akers,’ was amazing. We are also live on remote at the Hard Rock Hotel and Casino in Atlantic City every Friday.” At the first remote, he said, “the energy inside the sportsbook/casino was off the charts.”

As for the future of the concept? “The sustainability is going to depend on the appetite in local markets towards gambling,” said Jason Barrett. This said, “Revenue is projected to increase in this category, and to not be active in it when radio is fighting for every last penny would be foolish.”

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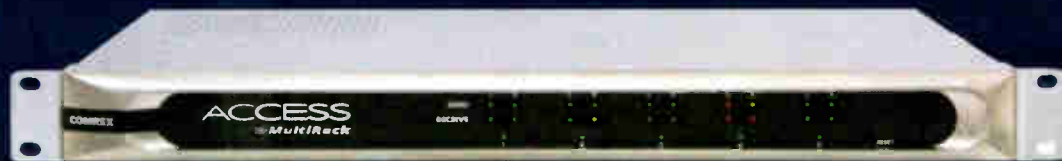


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# COMREX

# Community Radio Seeks More Engagement

Familiar challenges: How to grow audiences, how to attract younger people, how to engage

BY JENNIFER WAITS

As 2020 approaches, community stations face many vexing yet familiar challenges. Most want to grow their volunteer base as well their audiences/donors, across generations as well as across socio-economic groups, at a time when the role and relevance of radio itself is being challenged or rethought.

Nina Simon, author of "The Art of Relevance," says managers might ask themselves, "How do I get young people to volunteer or listen to my station?" She feels this is the wrong question because it takes the onus off the station.

Instead, she challenges organizations to focus on ways to make a station more welcoming to a plethora of audiences.

The nonprofit that she founded is OF/BY/FOR ALL. It articulates this vision by stating, "Putting up a 'Welcome' sign is not enough. To involve people in meaningful, sustainable ways, you can't just make programs FOR them. You have to involve them in their creation. And that means becoming OF and BY them too."

Simon, speaking at the Community Media Conference of the National Federation of Community Broadcasters earlier this year, said she has learned that while most people believe their organizations are welcoming to all, they will also say that their current audience doesn't reflect the diversity of their community.

This is a disconnect with which many community stations grapple.

## WHAT IS "INCLUSION"?

NFCB CEO Sally Kane has a deep understanding of the community radio landscape and agrees that there's work to be done.

"Lots of community radio folks say they are 'inclusive,' but in fact [their sta-

tions] are insider clubs that aren't seeing or understanding the fullness of their communities. And I think that is perilous," she said.

"For example, lots of rural stations are actually embedded in a dominant culture that is highly conservative, and [yet] they are more progressive. It's important for the stations to at least acknowledge that and not pretend that they represent the community as a whole."

Although it can be challenging for stations to connect with everyone, "community" is obviously the focus of community radio, for both its workforce of volunteers and for its audience of listeners and donors.

"Community radio is, by design, intended to be of, by and for the people," Simon said. "Especially today, when many com-

munity radio stations have been politicized or marginalized into perceived niches, I believe it's critical and meaningful to recommit to involving everyone."

Kane believes these conversations about engaging with audiences are imperative in the current hyper-connected media landscape.

"The digital space is highly interactive, so a one-way pipeline of delivering content is no longer adequate, and stations need to integrate that into the way they approach communication and content and organizational culture."

Young people are identified time and again as a vital component of radio's future; yet many a community radio station has an aging crew of volunteers and minimal involvement by new, young team members.

Simon suggests that stations get specific: "Identify a specific community of young people who you want to involve, whether that be high school band nerds or young professionals starting their first full-time job and looking for creative outlets. Then talk with them about what they are looking for from a volunteer or engagement experience. Base your offerings on their goals and interests, not yours."

## CALLS FROM HOME

Ways that community stations are

seeking to engage and evolve are reflected by others who participated in that NFCB conference.

WMMT General Manager Elizabeth Sanders says the rural Whitesburg, Ky., station works with its listeners who are incarcerated in at least six nearby prisons. WMMT has for many years communicated with prisoners and their families through its "Calls From Home" and "Restorative Radio" programs and more recently through a Prison Justice Assembly.

Sanders shares letters that the station has received from prisoners. She said WMMT is trying to represent those who are "the most marginalized" and also wants to bring a "multitude of voices" to the airwaves.

Collaborating with organizations that are enmeshed in specific communities is another way that stations are touching new audiences.

Kerry Semrad, general manager of KZUM in Lincoln, Neb., says the station has an innovative Podcast Partner Program that offers podcast training in order to broaden its public affairs programming. Through partnerships, the station was able to work with some of Lincoln's refugee communities and

community organizations in part to help make the station relevant to a broader audience, especially younger listeners.

Development Director Heather Andrews says that through conversations and surveys, the station learned about specific programming needs. As a result, the station is looking more closely at local programming and on-demand and mobile access for listeners. Andrews said that it was critical to "break down barriers" and "change things up" in order to attract new audiences.

As at KZUM, podcasting is an entry point for new participants and listeners at many community radio stations. Station Manager Ursula Ruedenberg of KHOI in Ames, Iowa, said its entry into podcasting was unexpected. In response to the lack of audio production training at the nearby Iowa State University, KHOI created an audio lab in order to work with the school newspaper. Ruedenberg said the program has expanded and now provides training as the required audio production class in the school's journalism program.

In a moment in history when so many people are racing to get involved with podcasting, KHOI realized that it could provide a needed service while simultaneously engaging with new audiences to spread the word about KHOI. This



Nina Simon

## Hot 88.7 - Hip Hop from the Hilltop / Calls From Home

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[meta:slider id=8846]

Hot 88.7 Hip Hop from the Hill Top / Calls from Home continues the tradition of the *Holler to the Hood* hip hop and calls show that first began on WMMT more than 15 years ago.

Hot 88.7 Hip Hop from the Hill Top is one of only two hip hop shows we know of broadcasting from the coalfields of Central Appalachia (and the other, *Jukebox Joint*, is also on WMMT!). Hosted by a crew of DJs (Izzy Lizzy, Jewelz, T-Ray, Tom, Aunt Bernice, Gabby LaLa, Rakim, Abby, Nicole, Marley), the show features the best of old school, new school, underground and southern hip hop, every Monday night from 7-9 pm.

Following the hip hop show is WMMT's *Calls from Home*. The show broadcasts messages from the friends and family members of those incarcerated in our region's prison system. We record calls for the show every Monday night between 7-9 pm, and then broadcast the messages that same night from 9-10 pm.

WMMT's local radio signal reaches: United States Penitentiary Big Sandy in Inez, KY; Otter Creek Correctional Center in Wheelwright, KY; Wallens Ridge State Prison in Wise County, VA; Red Onion State Prison in Wise County, VA; Koen Mountain Correctional Center in Oakwood, VA; United States Penitentiary Lee in Lee County, VA; Wise Correctional Unit in Coeburn, VA, and many regional jails and detention centers.

If you would like to leave a message for the show, please call:

**TOLL FREE 1-888-396-1208**

on Monday Nights between 7-9 pm Eastern Time



WMMT airs "Calls From Home," promoted here on its website. The station in rural Kentucky works with listeners incarcerated in at least six nearby prisons.

learned more about how KZUM could address their needs.

As a result, content is being developed in listeners' native languages. Semrad says the "only way to remain relevant is to learn from each other constantly."

Similarly, WERU Community Radio in Maine has been increasing the number and depth of partnerships with com-

type of collaboration also has helped to bridge the traditional "town and gown" divide in Ames, by bringing the student and non-student communities together in order to create audio.

The author is co-founder of Radio Survivor and co-chairs the College, Community & Educational Radio Caucus on the Library of Congress' Radio Preservation Task Force.

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# Radio Performance Tax Does More Harm than Good

Passage of the latest federal bill would force the closing of a majority of local stations

## COMMENTARY

BY PAUL S. ROTELLA

*The author is president/CEO of the New Jersey Broadcasters Association.*

Here we go again!

Every Congress, a few well-meaning but misinformed legislators appear to forget that they represent the people of their districts and not the foreign-owned record companies, and introduce in one form or another the toxic performance royalty fee legislation commonly known as the Performance Tax.

It does no one any good at all, least of all the vast and diverse audiences our free-over-the-air broadcasters serve, and helps stifle the creative growth and opportunities for success of emerging artists, while destroying the best thing that ever happened to our multi-faceted, shared culture: the free-over-the-air delivery of all forms of entertainment, local news, EAS warnings, AMBER Alerts and most of all — music, to everyone, for free — no matter your social status or place of origin — radio!

### HARMING ALL

Broadcast radio is enjoyed by almost everyone in America. For almost 100 years, Americans have had a love affair with broadcast radio. And for good reason: its bold, diverse, endearing, expandable, compact, ubiquitous, portable, lovable, affordable and incontrovertible value as the most ubiquitous source of news, information and diverse entertainment available to everyone, and all for free.

No download charges, no subscription fees, and no license fees for the end user. It informs and binds us, it makes us laugh, it heals our wounds, it provides comfort and lifesaving information in times of crises, and oh yeah — it's always on!



Paul S. Rotella

But the wrongheaded measures pushed by some who insist on squeezing every dime out of a broadcaster's craft would tamper with this timeless recipe for universal happiness.

But much more horrifying, these Performance Royalty Taxes would destroy radio as we know it, and indeed harm everyone: artists, composers, communities, broadcasters and most sadly, everyone who enjoys radio today — about 300 million of our friends, family, neighbors and co-workers in America alone — the very constituents that these legislators are supposed to serve.

The good news is that support for the Local Radio Freedom Act supporting local radio continues to be strong in the House and the Senate. Currently, more than 200 members of the House are on record in opposition to a performance tax.

New Jersey broadcasters would like to express our deep appreciation to

**In these challenging economic times, can any industry afford such confiscatory increases in net operating costs?**

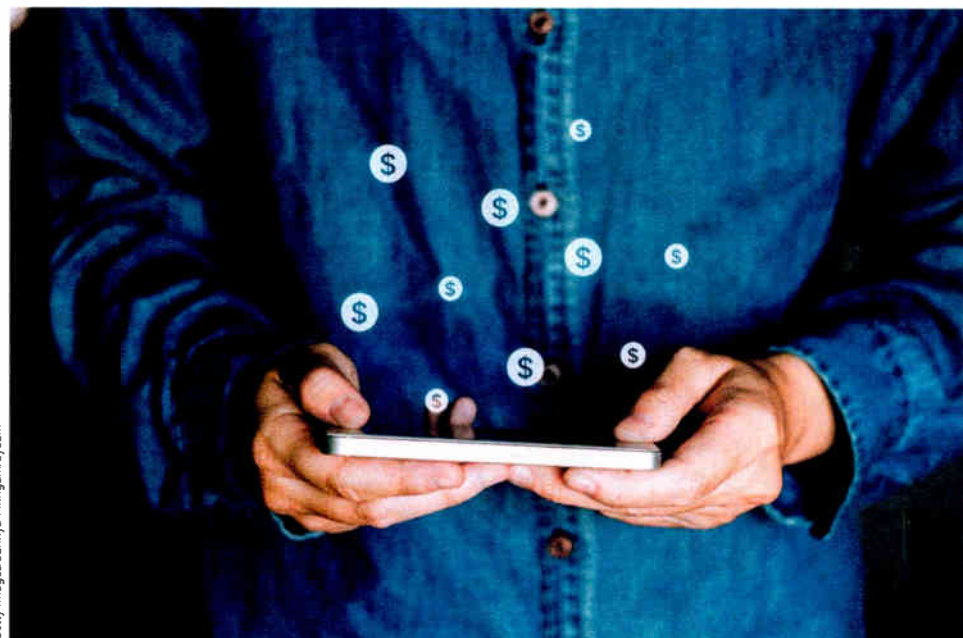
our congressmen for their courageous leadership in previously opposing this unfair and wrongheaded tax. These legislators are to be applauded for their early recognition and constant vigil over free-over-the-air radio's service to the local communities they represent across the Garden State.

### STEALTH ATTACK

However, the NJBA was always convinced that a stealth attack on free over-the-air-radio was very possible, as we saw with the introduction of two P-Tax bills in Congress in late November.

In New Jersey, local radio is very, very important, and the prospect of a Performance Tax is akin to a Death Tax for broadcasters.

The P-Tax would demand exorbitant royalty fees from broadcasters to pay for the a few record labels failed business models. And these new royalty fees



Getty Images/Sarinya Pinnangam/EyeEm

would be on top of the billions the radio industry already pays in royalties to artists and songwriters through ASCAP, BMI and SESAC!

In these challenging economic times (or in any economic model), can any industry afford such confiscatory increases in net operating costs? And the public would gain no return for

voice and an affordable, effective outlet to market their goods and services to their obvious customers and constituencies.

But this is all not about dollars; It is about common sense.

### A WARNING WARNING

Much more horrific, the closure of these vital broadcast outlets across America would also decimate our Emergency Alert warning system capabilities and pose a genuine threat to homeland security. And for what? So a few greedy foreign-owned record companies can try to line their coffers with more American dollars, taking billions out of our economy? And worse, the move would directly or indirectly, wipe out hundreds of thousands of jobs in the United States.

Moreover, a new oppressive Performance Tax would hurt emerging artists who might not ever get their music on the air if stations have to pay a fee every time a new song is played.

Performing artists almost universally recognize the honest and incomparable value only broadcast radio air-play adds to their industry and business model. The record labels' recognition of the unparalleled promotional value of radio airplay contradicts statements made by recording industry representatives in Washington.

Our two industries have worked perfectly together for decades. Certainly, no artist would ever have an opportunity to become famous and successful absent their natural symbiotic partnership with free-over-the-air radio! This symbiosis evinces the inescapable conclusion that both sides are benefiting. Why do you think local stations across the country are bombarded every day with sample



CDs, MP3s and “demos” by emerging artists (and seasoned veteran artists) begging station managers to play their new tune? It’s because broadcasters and artists genuinely “get it.” It’s how they sell records (yes, vinyl records are making a comeback), CDs, downloads, video and merchandise.

Worse, the P-Tax’s foreseeable fractionalization of collaborative artists could hurt everyone associated with the creative process and diminish the very projects or songs they want to promote to be successful. It’s a recipe for collusion, litigation, division, unfairness and disaster.

So you see, a new Performance Tax imposed on radio stations by record companies would only be biting the very hand that feeds them.

Equally disturbing is the disingenuous comparison of broadcast radio to internet providers and pay/subscription audio entertainment programming and fees paid by satellite radio. The proponents of this legislation want us all to be alike — just because cable, satellite and internet services pay these royalties. **BUT: We are not alike!**

**TRULY LOCAL**

Remember how radio stations helped warn and serve New Jerseyans crushed by Sandy? Well, New Jerseyans do. Free over-the-air radio and television are the only exclusively local media in existence! Did you ever see a pure-play or satellite station sponsor a little league team or do a food drive for a local charity?

Our cherished stewardship of the public airways is a public trust, and no industry is more publicly spirited than broadcast. We have a very different mission, mainly to operate in the public interest; from the sustaining value we provide for the EAS for local emergency notification such as New Jersey AMBER Alerts, and in response to community-wide emergencies like Superstorm Sandy, ice and snow storms, and other extreme weather hazards, to local news of community events and happenings in entertainment in an amazing variety of formats.

The internet and satellite applications referred to in mislabeled “equitable royalty fee” arguments (and the specious claim of pure-play “radio” designations) do not provide such essential public services, nor are they designed or equipped to do so.

Compared to free radio’s 300 million listeners in the United States alone, satellite and subscription services reach less than 10% of radio’s ever-expanding and diverse listening base. And radio’s service is free! Think about how many people in today’s tough economy can afford to pay to hear radio in the first place. (By the way, if anyone wants to

see the effects of wrongheaded performance fees, just look at the 30%+ increase in satellite’s monthly subscription fees for royalties and the “going dark” of some radio stations’ streaming audio on the net, due largely in part to the ever-increasing royalties charged to stream content.)

And to lay to rest the specious argument that the performing artists will get any money from the new Performance Tax, all you need to do is review the typical recording contract any new artist is “forced” to sign if they want to get their coveted “record deal.” It often

provides for very little compensation to flow to the artist after record production and promotion costs are recouped.

More disturbingly, many artists complain about the notorious greed of the industry itself. In a surreal report released a few weeks after Michael Jackson’s death, it was revealed that the King of Pop told interviewers that it was “time for artists to take a stand against record labels.” In a video interview filmed by director Brett Ratner, Jackson “lashed out at record labels. Asked about his greatest lesson learned, Jackson replied: Not to trust everybody

in the industry. There are a lot of sharks, and record companies steal. They cheat. I have to audit them. And it’s time for artists to take a stand against them.” Bravo, Michael.

Finally, our great New Jersey Broadcasters Association represents much more than the radio and television industry in the Garden State. We also represent the vast and diverse audiences that our members so ably serve. We represent the people, and we stand with them. We respectfully ask all of Congress to the same. It’s the right thing to do.



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## FUTURE

(continued from page 3)

its results should be read as providing insight into behaviors among radio listeners rather than consumers at large.)

FM radio leads the list of can't-do-without features when buying a new car: 80% of the respondents indicated FM radio as their top priority, followed by Bluetooth and aux-in. Smart speakers are experiencing a dramatic popularity rise, gaining 6 points from 21% in 2018 to 27% in 2019.

The radio industry plays a noticeable role in this success, McEwen said, since AM/FM radio scores the best result among the smart speaker audience share: 18%, followed by Amazon Music (17%) and Pandora (13%), according to the "Share of Ear" report from Edison Research.

While the most common use of smart speakers is answering general questions (28%), a quarter of smart speaker owners listen to music from AM/FM radio on their devices, and a remarkable 15% listen to news or talk from AM/FM stations.

### HYBRID APPROACH

McEwen discussed the presence and possible future scenarios for radio in dashboards. "The radio tuner is less prominent in the car," he said. "The

question I have is: Where is the radio button on the car dashboard? It's a huge issue for us."

He said NABA is studying "strategies on how to get radio's prominence back to the car and how to re-engage North American in-car listeners."

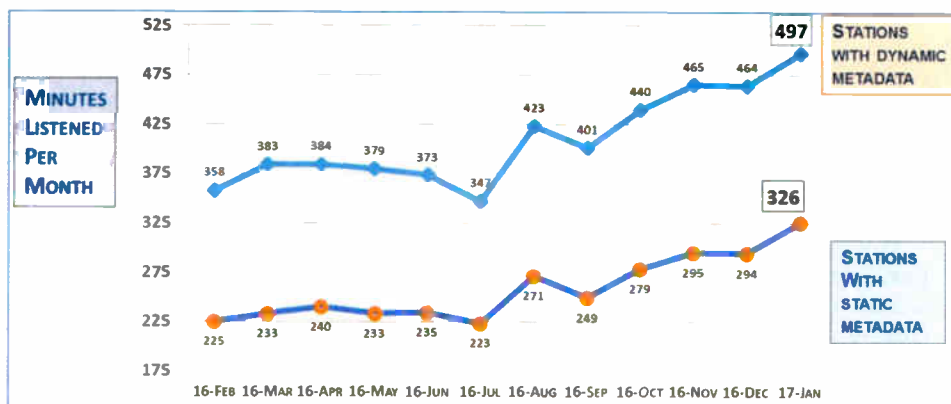
In his opinion, internet-based content created with hybrid (over-the-air plus internet) receivers encourages automakers to add the technology; so, he said, the time has come to step on the throttle of hybrid adoption for both linear and non-linear consumption.

He also emphasized the importance of metadata in any hybrid scenario. NABA recommends stations adopt at least static metadata, but preferably dynamic metadata, and then assess their audiences' behavior to fully understand the potential benefit of the technology.

### DYNAMIC METADATA

Making metadata visible to listeners requires work for station personnel and technology investment for the station. So why do it?

McEwen said data analytics show that enhanced content means more listening. Emmis Broadcasting has publicly shared information about monthly listener minutes compared with station use



Comparison of monthly listening figures between radio stations using static vs. dynamic metadata as gathered by NextRadio in 2016 and 2017.

of metadata. (The data was gathered from millions of listening hours by users of the NextRadio mobile app before the company ended support for that initiative.)

According to the data, listeners spent more time with stations that supplied at least a static logo than those that did not. Listeners spent even more time with stations supplying dynamic metadata than those that only supplied static metadata: from 52% to 64% extra minutes.

McEwen also recommends resources from NAB, found at [www.nab.org/innovation/digitalDashboard.asp](http://www.nab.org/innovation/digitalDashboard.asp), as a valuable source for best practices around metadata and in-car listening.

He concluded by saying a key pur-

pose of NABA will be seeking consensus among the North America broadcast community about how to preserve radio's prominence in the automotive dashboard. Its goals include defining technical requisites for radio and audio in the car dashboard as well as common requisites for hybrid radio and metadata.

"Those three projects are ongoing," McEwen explained "and we will share the results at the NAB Show next April at our Future of Radio and Audio Symposium."

*Daive Moro reports on the industry for Radio World from Bergamo, Italy.*

Read "The Value Proposition of Radio in a Connected World" at <https://tinyurl.com/NABA2019>.



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## Don't Let Mice Kill Your Transmitter

Also, rodents "walk the plank" when lured to Greg Muir's orange bucket

### WORKBENCH

by John Bisset

Email Workbench tips to johnpbisset@gmail.com

Jim Leedham's Broadcast Electronics FM35T transmitter was down, although the station air signal was protected by a backup. As he drove to the site, Jim ran through the scenarios of what he might find, as most engineers do.

Once on site, Jim killed the breakers, shorted the components and with a strong trouble lamp looked inside. It didn't take long to find something that didn't belong, as you will see in Fig. 1. He quickly removed the intruder and

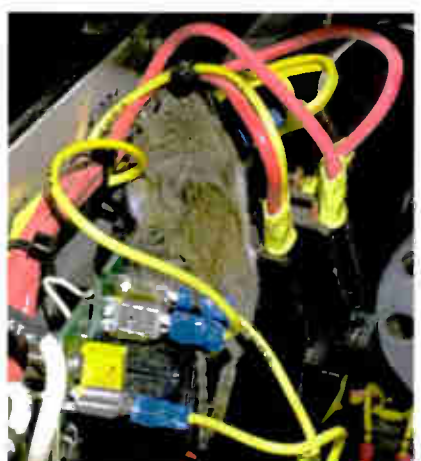


Fig. 1: Searching for warmth, this critter met its end inside a transmitter.

restored the rig to the air.

The rest of Jim's time was spent seeking to improve his rodent prevention. He plugged a couple of cable pass-throughs at the base of the transmitter. He also inspected the floor and racks for droppings, which would indicate a larger infestation. None found, he spread mothballs and mouse bait to guard against future intruders.

This is the season when rodents seek the comfort of a building. A few steps now can ensure they don't choose your transmitter building.

While we're on the subject of rodent infestation: Wolfram Engineering principal engineer Greg Muir read about the DIY rat trap we described in October. He says he recently discovered a similar "trap" for rodents at one of the sites he maintains.

As pictured in Fig. 2, a "plank" is mounted on a pivot shaft near the edge of a bucket. This plank is held in a horizontal position by a weak magnet, placed underneath, just before the pivot shaft. The unsuspecting mouse heads up the ramp (Fig. 3) and walks out onto the plank to get to the peanut butter. The magnet separates from its keeper, and the plank gives way, dumping the mouse into the water in the bottom of the bucket.



Fig. 2: Mice "Walk the Plank" in this commercially available mouse trap.



Fig. 3: The plank tips as the mouse approaches the peanut butter bait.

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The assembly appears to be a commercially-made item; the Home Depot bucket may suggest the source. Greg says that this rig was in place for a few months and never did dunk a mouse (even though the traditional mouse bait, located in other parts of the room, effectively did its job).

Greg theorizes that the local mice may have served on board ships at some point, and knew full well what a mutiny meant! Arrrrrr, matey.

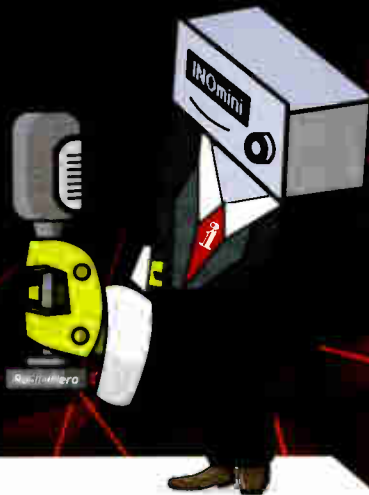
For sites where traps can be checked daily, Radio World editor Paul McLane prefers humane traps and recommends you Google "humane mouse trap."

From Monday Morning Coffee and Technical Notes — a free e-newsletter from the Alabama Association of Broadcasters, authored by Larry Wilkins, past recipient of the Radio World Excellence in Engineering Award — comes this reminder: By now, all stations should have updated their EAS equipment to handle IPAWS messages correctly.

(continued on page 16)

# INO mini

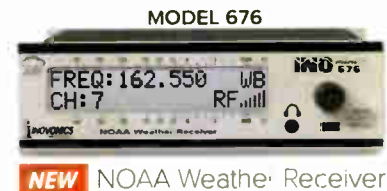
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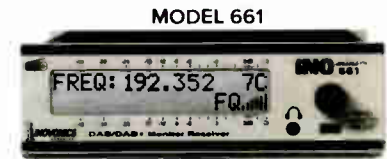
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# Staying Safe Around RF: An Industry Expert Tells All

Maryland seminar tailored to assist transmitter/tower workers

BY JAMES E. O'NEAL

**COLUMBIA, Md.** — By his own admission, Richard Tell has climbed lots of broadcast towers, gotten himself exposed to some really intense radio frequency fields, suffered RF burns and on occasion has even (accidentally) burned out “some fancy test equipment,” but “never to my knowledge experienced a health effect from my work in RF fields, except for the burns.”

Tell, now 75, and an industry expert in the effects of RF radiation on the human body, shared some of his experiences and deep knowledge of the subject at an RF safety seminar put together by the Washington, D.C., and Baltimore SBE chapters under the auspices of Fred Williard, an officer of the D.C. chapter, and hosted by Rohde & Schwarz at their North American headquarters and training facility.

Tell's presentation—“Staying Safe In RF Fields”—was tailored to provide broadcast engineering personnel and others involved in RF work with the knowledge they need to stay safe and prevent injury. The free day-long course attracted transmitter operators, station and broadcast group personnel, consult-



Richard Tell

ing engineers, network employees, two-way radio service technicians, government and military employees, amateur radio operators and even a SiriusXM satellite radio representative from as far away as New York and Richmond, Va.

Tell, an IEEE Life Fellow and chair of RF safety-related committees within IEEE, spent some 20 years with the federal government, working for the Center for Devices and Radiological

Health, and later serving as chief of U.S. Environmental Protection Agency's Electromagnetics Branch, and providing technical support to the FCC when that agency was setting new rules for human exposure to RF fields.

His 52-year-long career not only includes laboratory work and computer modeling, but also plenty of “hands-on” experience—including purposefully subjecting himself to RF currents—that makes him uniquely qualified to impart knowledge and field inquiries into this sometimes rather gray area of radio and TV station operations.

## WHERE THE DANGER LIES

In setting the stage for the “practical” portion of his presentation, Tell provided a definition of “MPE,” or Maximum Permissible Exposure (“according to the FCC, this is the amount of field exposure outside the body that is considered safe”), and “SAR,” or Specific Absorption Rate (“the rate at which RF is absorbed in the body, and which is the basis for our safety standards”).

He also distinguished between ionizing and non-ionizing radiation—terms that confuse many lay people and even some professionals. Ionizing radiation

occurs when there's sufficient energy to remove electrons from an atom typically associated with very penetrating radiations, such as x-ray and gamma; non-ionizing refers to any other type of electromagnetic radiation, including the radio frequency spectrum.

“Radio waves do not have sufficient energy to ionize atoms,” said Tell, assuring course attendees that this was not something they had to worry about. “RF fields are not the same as ionizing radiation. They cannot ionize tissue, and unlike ionizing radiation, the biological effects are not cumulative.”

Tell explained that aside from burns suffered from contacting RF-energized conductors, the greatest effect of radio waves on living organisms was heating of tissues, noting that 60 years of research on the effects of RF exposure has established, among other things, that when RF levels fall below a certain threshold, there is no measurable effect on human bodies. Such research has also established a useful “threshold” for what constitutes an excessive RF level.

“The most sensitive and reliable indicator of an established and potentially adverse biological effect of RF radiation exposure has been behavioral disruption of a learned task in laboratory animals.”

(continued on page 18)

## WORKBENCH

(continued from page 14)

The deadline was Nov. 8; however, some stations may have taken advantage of what they consider a “60-day extension.” The FCC did not issue an extension, but Part II of the rules has always contained a paragraph noting that if an EAS device is not operating normally, the station could operate for up to 60 days while correcting the problem. Larry warns that this is not a reason for delaying your upgrade.

Special project engineer and Radio World colleague Dan Slentz is a wealth of broadcast solutions, many of them at low- or no-cost. Dan found a radio news service that provides news content to stations at no charge, while encouraging financial support donations.

Public News Service delivers one newscast per day, updating it if something is breaking. The six-minute newscast has a three-minute “clean out point” with the cue, “This is PNS.”

They also offer both state and regional stories and actualities. The best part, they stay “content neutral,” meaning no “pro” or “anti” anyone. Find it at [www.publicnewsservice.org](http://www.publicnewsservice.org).

Modern advances allow ordinary folks to install weather stations on their own property. With the advent of smart technology, a company named Weatherflow plans soon to ship its latest weather sys-

tem, called Tempest.

The Tempest promises to use artificial intelligence to provide accurate, up-to-date weather information and may be helpful at operations where conditions can “turn on a dime.” Two things that set this instrument apart are that it is solar-powered and that it is compact, about the size of a camping lantern. It's also wireless, so no cabling is necessary.

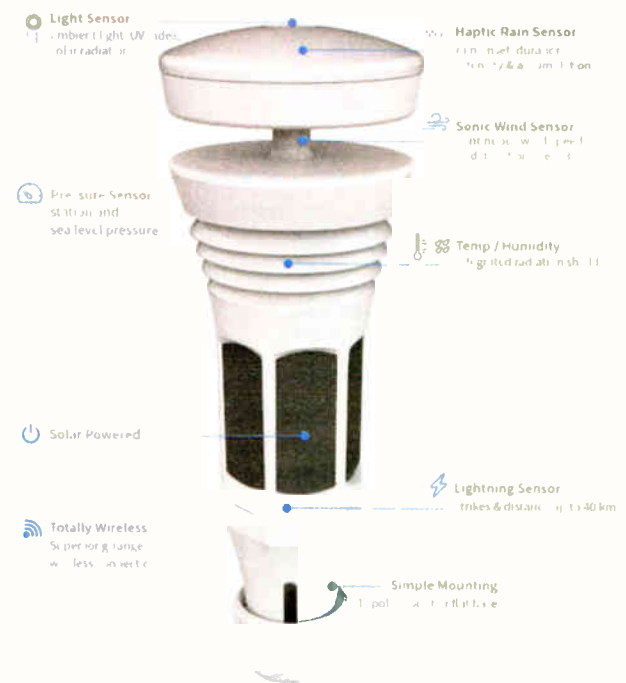
Google “Weatherflow Tempest.” It is scheduled to be available in retail in April, with early crowdfunding backers seeing theirs sooner. (If you haven't yet participated in a crowdfunding venture, read up on how they work first.)

See other interesting products (like a tiny wind meter you plug into your smartphone) at [weatherflow.com](http://weatherflow.com). Current products from the company are available on Amazon.

The Society of Broadcast Engineers is promoting a mentoring program for new engineers. Radio World and Workbench heartily support that goal. If you haven't already, please consider joining SBE, and then inquire about how you can help.

Also, you can mentor others and earn SBE recertification credit by sharing tips here in the pages of Workbench. Send tips and high-resolution photos to [johnpbisset@gmail.com](mailto:johnpbisset@gmail.com).

John Bisset has spent 50 years in the broadcasting industry and is still learning. He handles western



**Fig. 4: The Tempest, supported by crowdfunding, promises “AI-powered weather forecasting” in an easy-to-use package for your home or facility.**

U.S. radio sales for the Telos Alliance. He holds CPBE certification with the SBE and is a past recipient of the society's Educator of the Year Award.





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### FM/HD LIVELOC FM/HD SIGNAL SYNC

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Each X5 function in the chain interacts closely with other functions to deliver just the right amount and type of processing needed, creating a sound that's as close to the original as possible.

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Proprietary high-frequency distortion canceling technology passes the highs, but not the overshoot. No more "spitty" highs or pops from clipping; no IMD distortion whatsoever. Takes all the highs you can give it and never gives you back IMD.

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World Radio History

## RF SAFETY

(continued from page 16)

said Tell. “Their performance ‘slacks off’ because they are ‘warming up’ and less inclined to do what they were trained to do.”

He noted that the threshold for such behavior modification began at a SAR of about 4W per kilogram of body weight, and that this exposure level had been extrapolated to humans and adopted by the FCC in its regulations limiting exposure. Tell stated that a safety factor of 10 is used to constitute what is considered “safe,” with 50 times less exposure being “safer than safe.”

Tell said that in calculating what a “0.4W/kg safe” exposure would be for a 180-pound individual, it amounts to 33W distributed within the tissues. He noted that the normal metabolic rate for humans at rest is about 105W.

“When RF energy is delivered to a lossy material such as body tissue, it produces heating of those tissues,” he said. “Elimination of heating of the body is the primary objective of most safety regulations today.”

Tell observed that the effects of RF on the body are not uniform, with some areas being heated more than others, and that this heating is frequency-dependent, as humans resonate at around 65 MHz.

About 40 people from radio and television operations, government agencies, consulting firms, and other enterprises working in RF attended the day-long seminar.

About 40 people from radio and television operations, government agencies, consulting firms, and other enterprises working in RF attended the day-long seminar.

“FCC exposure limits are based on limiting the rate at which RF energy is absorbed in terms of watts per kilogram of body mass so that you don’t warm up,” said Tell. “A hazardous level of exposure is reached when you begin to warm up from the RF energy impinging on your body.”

“The ‘take-home’ here is that if you feel warmer than you suspect would be normal, back off and ensure that your exposure is within the accepted limits.”

### PROTECTIVE MEASURES

Tell noted that portable “clip-on” RF

monitors, while not necessarily precise indicators, do provide “early warning” information that is useful in flagging what may lead to excessive exposure in RF environments. He also provided some tips for proper use of such monitoring devices, as well as suggestions for mitigating one’s exposure.

“Always wear an RF monitor on the front of your shirt; it should face the antennas generating the radiation you’ll be exposed to,” said Tell. “The difference between front and back can amount to a factor of 16 at 100 MHz. If the monitor sounds only occasionally that’s not a problem. If it’s steady, then it’s time to get out of the area.”

“If you have to work close to a high-power antenna, use a personal monitor to determine if the area is below the exposure level; if not, the transmitter must be shut down and locked/tagged out, especially if it’s remotely operated. Take the lockout key with you until all work is completed and the system can be returned to normal operation.”

Other tips include staying behind directional antennas when doing tower work and exercising care when working around non-directional radiators.

“You cannot hide behind an omnidirectional antenna like you can a dish, a Yagi or a panel antenna,” Tell said.

He observed that there were some cases where broadcast operations could not be interrupted and doing work around such transmission sites called for operating with reduced power or wearing a protective body suit and hood designed to attenuate RF exposure to the body.

“Such a suit greatly reduces RF exposure,” said Tell. “But always remember that the suit does not make you into Superman.”



Getty Images/David H. Carriere



Some 40 individuals from radio and television operations, government agencies, consulting firms, and other enterprises involving exposure to RF radiation traveled from as far away as New York to the Washington, D.C./Baltimore suburb of Columbia, Md. to learn more about safeguarding themselves at transmitter sites.

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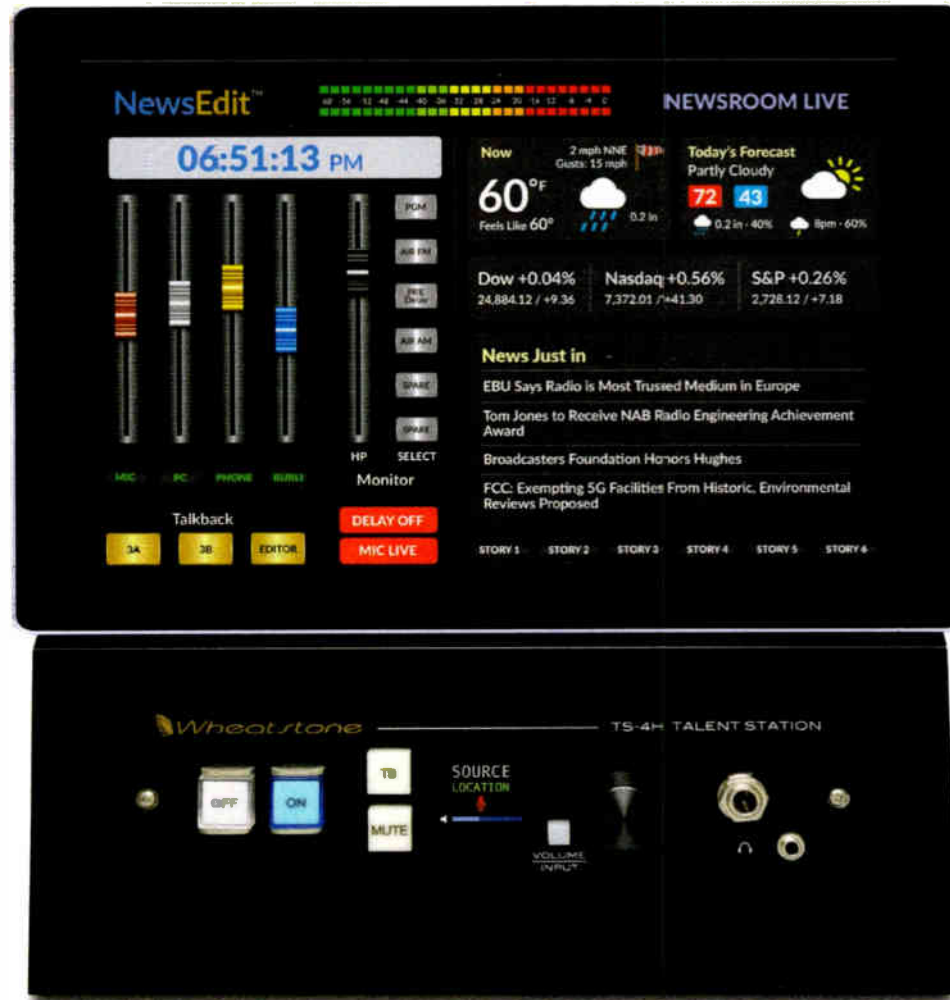
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# MARKET PLACE



**Superwave:** Waves Audio has shipped Waves SuperRack plugin processing software for live sound and broadcast engineers.

The software plug-in rack allows users run up to 128 audio channels through multiple instances of Waves plug-ins with low latency and customization options for adapting it to the user's mixing workflow.

SuperRack operates in a SoundGrid Audio-over-Ethernet network, processing audio on a dedicated SoundGrid DSP server, which moves plug-in processing from the host computer to an external DSP server in order to increase plug-in count, minimize latency, and enable the host and I/O devices to be situated far apart from each other.

According to Waves, users can run plug-ins in real time, customize a workspace with floating windows, set extended-scope snapshots and more.

Based around a multitouch-friendly graphic interface, SuperRack allows users to view and control multiple plug-in instances simultaneously and expand their workspace to up to four monitors. Up to a dozen of the user's top priority plug-ins per snapshot can be called up in the Hot Plug-Ins panel, and all plugs' parameters can be adjusted with a "Touch & Slide" fader — among other features

Info: [www.waves.com](http://www.waves.com)

**Podcasting Power:** Marshall's microphone and accessories division MXL has packaged together some of its offerings into a podcasting bundle.

Called APS

Podcasting Bundle, it consists of MXL's BCD-1 dynamic broadcast microphone; its companion BCD-Stand; and the Mic Mate Pro XLR-USB digital audio interface/adaptor.

The heart of the bundle is the top-address BCD-1 microphone. It has a dynamic element, internal shockmount and tuned grille to combat unwanted noises. Its design aims to also have high side noise rejection.

The Mic Mate Pro offers gain and headphone controls with 16-bit 44.1/48 kHz conversion.

MXL Microphones Sales Director Trevor Fedele said, "In the last decade, podcasts have seen a huge surge in popularity, and our APS Podcasting Bundle provides the quality tools needed for those in this market. ... With the creation of the APS Podcasting Bundle, studio-quality broadcasting technology is now within the reach of every recording enthusiast."

Info: [www.mxlmicro.com](http://www.mxlmicro.com)



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## USB Opener:

Software developer and digital audio hardware maker Steinberg is expanding its line of portable and rackmountable digital audio interfaces with the UR-C line of USB C interfaces.

The UR-C family will initially offer two- (UR22C) and four-preamp (UR44C) models with a rackmountable eight-preamp (UR816C) model following. There's also a "Recording Pack" bundle featuring the UR22C.

All models offer 32-bit/192 kHz conversion, 48V phantom power, Neutrik analog combo connectors, Hi-Z switch, MIDI I/O, and software including REV-X Reverb, Channel Strip, Guitar Amp Classics, dspMixFx, Cubase AI and Cubasis LE. All are Windows-, Mac- and iOS-compatible.

The UR816C also offers word clock ADAT I/O for those with legacy equipment.

There is also a UR22C Recording Pack bundle version featuring all of the previously listed plus the ST-M01 condenser microphone (with cable) and ST-H01 headphones along with WaveLab LE software.

Prices: UR22C: \$239; UR44C: \$439; UR816C: \$789; and UR22C Recording Pack: \$439.

Info: [www.steinberg.net](http://www.steinberg.net)



MARKETPLACE



**Lyra-cal:** Harman Professional Solutions has announced its new AKG Lyra ultra-HD, multi-mode USB condenser microphone.

The AKG Lyra provides 4K-compatible, Ultra HD-grade 24-bit/192 kHz audio resolution, according to the company, in part due to its AKG Adaptive Capsule Array, which provides user-selectable capture modes optimized for different performance formats. As a USB mic, it offers "plug-and-play" operation, sports accessible controls, features an internal self-adjusting shockmount and built-in sound diffuser and more.

The AKG Adaptive Capsule Array uses four capture modes to adapt to performance needs. Front mode isolates the target sound, rejecting unwanted sounds at the microphone back and sides. Front & Back mode captures and blends together sound equally on all sides, while Tight Stereo mode captures audio in true stereo with discrete left and right audio, providing separation for side-by-side interviews or panel discussions, or for recording instruments like drums or piano. Wide Stereo mode is intended for capturing audio with greater stereo separation, room ambience, and depth.

Lyra is compatible with Windows, Mac, iOS and Android devices, and sports a "zero-latency" headphone jack and headphone volume knob that eliminates the short delay between speaking into a microphone and hearing the signal in the headphones, so creators can stay focused on their performance.

Info: [www.akg.com](http://www.akg.com)

**Calendar Time:** John Schneider's epic Radio Historian's calendars are always a treat for radio aficionados.

His latest, the 2020 edition, is no exception. Perhaps the best ever, it is packed with colorized black and white photos of radio facilities, mostly studios and mostly pictures taken in the 1920s, 30s and 40s. Highlights include the Lindbergh baby kidnapping, Orson Welles and Burns & Allen.

Also outstanding are facility pictures of Powel Crosley's WLW and Edwin Armstrong's New Jersey FM test site.

Not to be missed and it makes a great Christmas gift (assuming the intended hasn't already beaten you to it!).

Info: [www.radiohistorian.org](http://www.radiohistorian.org)



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Moseley uses proprietary technologies and owns more than 50 patents and has delivered more than 1 million radios deployed in over 120 countries.

## MARKETPLACE



**Quiet Impressions:** Acoustic treatment manufacturer GIK Acoustics has introduced an acoustic foam option for its Impression Series and Alpha Series room treatments.

Both the Impression and Alpha Series of acoustic panels utilize front plates with designs cut into them to both absorb low-to-mid frequencies while diffusing high frequencies simultaneously.

Available in squares measuring 23.5 inches x 23.5 inches and 2.25 inches-thick, the newly added acoustic foam option was characterized as "lightweight, versatile, affordable, and effective" by Glenn Kuras, president of GIK Acoustics.

The Impression Series is available in a dozen patterns, while the Alpha Series is available in three mathematical patterns and five different plate finishes.

Info: [www.gikacoustics.com](http://www.gikacoustics.com)

**Small Monitor:** The Adam Hall Group has unveiled its Palmer brand's new active five-inch studio monitor Studimon 5 studio monitor.

The Studimon 5 comes in compact bass reflex housing with wooden sidewalls. It has a five-inch ferrite custom subwoofer, 0.75-inch neodymium silk diaphragm tweeter, and a frequency response of 70 Hz to 20 kHz.

The two-way monitor, with an output power of two 30 W (RMS) is intended for home studios as well as professional audio environments.

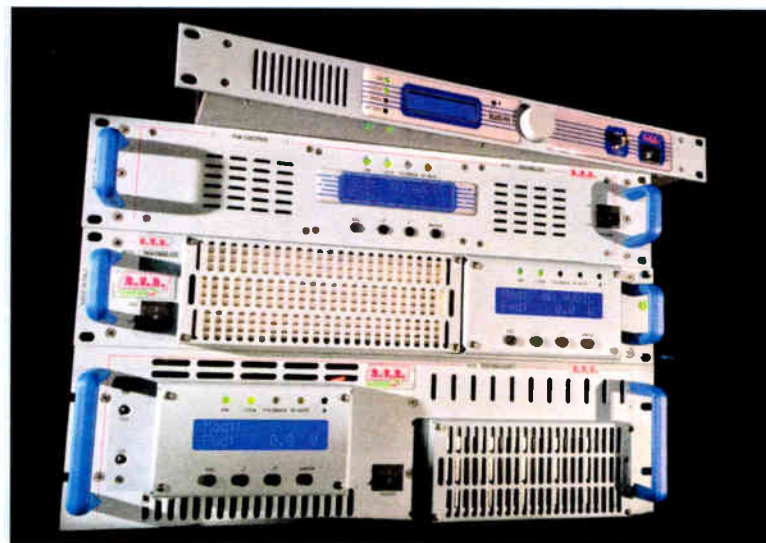
The back of the Studimon 5 features a 1/4-inch jack, XLR inputs, and a volume controller for tuning stereo balance.

The Studiomon is priced at \$241.

Info: [www.palmer-germany.com/en](http://www.palmer-germany.com/en)



## BUSINESSUPDATE



### PROGRESSIVE CONCEPTS TAKES ON RVR

Deal with Italian transmitter company includes products and service

Equipment dealer Progressive Concepts has announced an agreement with transmitter-maker RVR Electronica of Italy to become an authorized equipment dealer and service center.

Progressive will handle RVR's stereo FM transmitter line: TEX30, TEX100, TEX150, TEX300, TEX502, TEX702 and TEX1002. These range from 30 W to 1 kW in power and can be controlled remotely via the web.

All of the TEX models feature a stereo encoder with left and right analog audio inputs, mono inputs, and MPX composite signal and auxiliary inputs for SCA/RDS signals. They utilize a Power Factor Correction power supply.

They are FCC- and Industry Canada-approved.

Info: [www.progressive-concepts.com](http://www.progressive-concepts.com)

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# Media Efficiency Versus Effectiveness

Impressions are meaningless if nobody actually notices them or takes action

When approached about a media project, I start by jumping to the end: "How are we going to measure success?" One would think that as measurement has become more sophisticated, accurate and granular, the reply would be simple and direct. Wrong!

If anything, expected positive outcomes are rarely fully considered before an approach is selected. Once they've committed to it, advertising agencies, clients and even stations tend to focus on media efficiencies. Yes, there's a lot to unpack here!

## BAD "IMPRESSIONS"

Ever since ratings were conceived, cost per point (or per thousand) has been touted as the holy grail. Defining success as spending the least to deliver the largest possible audience is perhaps the most misleading way to prove to advertisers that the person placing the campaign is a brilliant champion, looking after the client's best interests.

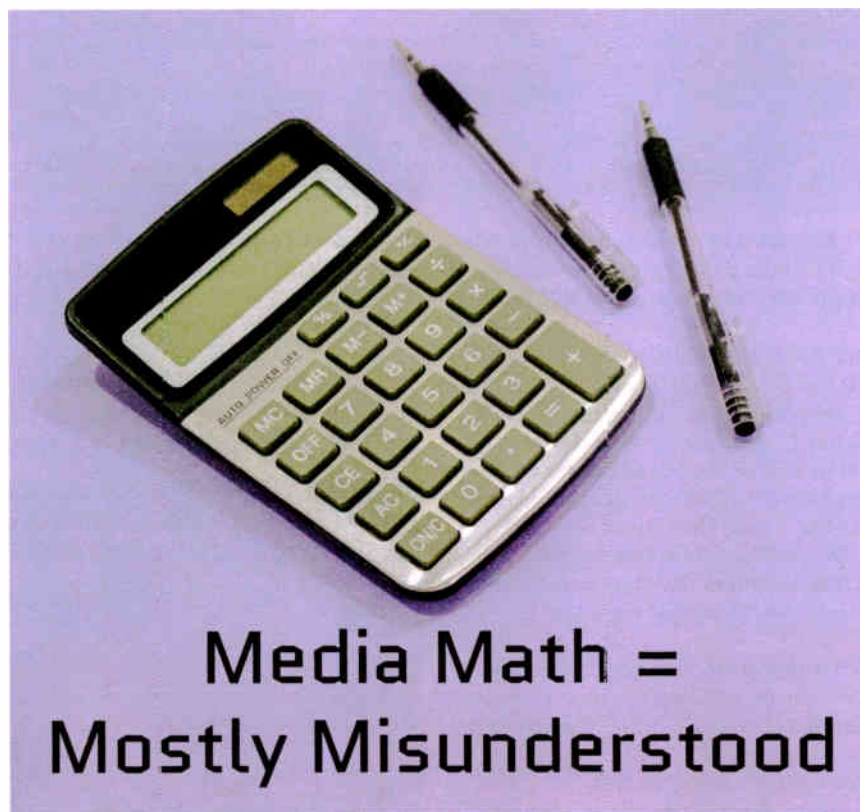
**I hope you will agree that not every listener hears every single advertisement. I know this can be painful to admit, but we must look in the mirror.**

The appeal to everyone involved in this oversimplification is that it can be devised with little effort, described as the best use of investment and delivered as a sure means of success.

First off, it is natural to figure that media efficiencies improved with the arrival of digital media in the 1990s.

In my view, it actually got worse, because the media industry expanded the use of the term "impression" and adopted it as a key metric.

Advertising had used "impressions" prior to digital, but it was mostly a guess. With websites, the definition was expanded to measure every time a banner ad loaded on page. If there were five banner ads that loaded, that became



five impressions. Holy moley — the ad industry could generate thousands, even millions of impressions!! Man, that's gotta sound great to any client.

The obvious difficulty is that impressions are meaningless if nobody actually notices them or takes action. Even when a user clicks, they don't spend more than a second or two looking at whatever they're now viewing because it doesn't match their expectations.

In terms of broadcasting, I hope you will agree that not every listener hears every single advertisement. I know this can be painful to admit, but we must

look in the mirror.

I am not advocating that we never use media efficiencies; but we must understand that this one-trick pony does not measure the most crucial component of advertising, which is effectiveness! If one of your salespeople devises a schedule solely based on efficiency and the client's cash register doesn't *ka-ching*, would you say that the campaign was a success?

Advertising — like content creation — is an art, not a science. We measure it because clients expect us to do so and it's encouraging to have apparent

## PROMO POWER



Mark Lapidus

evidence in front of us. However, we must always remember that advertising's center should be about creativity, relevance and innovation. Advertising that's written and produced with entertainment, facts and special offers has a much better chance of motivating purchase decisions.

Haters of my rant against media efficiency dynamics may cite the successful utilization of big data in driving results. While big data is beginning to produce results, it is not about media efficiencies, and I've yet to encounter anyone in broadcasting manipulating huge databases, so we'll save that topic for another day.

## AGREE ON EXPECTATIONS

So how do we measure success?

This starts by having an open discussion with the client to agree on expectations. For example, a client may express that they expect their sales will go up by a certain percentage during and directly after the campaign airs. It's then up to you to find out how or why they believe this to be an achievable result so you can expand their understanding. If you're dealing with a client's agency and they pick a media efficiency goal, you likely have no choice but to comply. It would still be worth trying to dig deeper to understand what the true expected outcome is so you might be able to adjust the creative or scheduling. You might also remind them that nobody ever wins awards based on media efficiency.

Mark Lapidus is a multiplatform media, content and marketing executive, and longtime Radio World contributor. Email mark.lapidus1@gmail.com.

 <p><b>Studio Items Inc.</b></p>    <p>Mic Booms On-Air Lights Speaker Mounts www.studioitems.com</p>	 <p><b>TORPEY TIME</b> (The Good Time People)</p>   <p>Clocks Up/Down Timers www.ram68.com</p>	 <p><b>Dixon Systems</b></p>    <p>News Mixers Line Matchers USB Audio Codecs www.ram68.com</p>	 <p><b>RAM Systems</b></p>    <p>Broadcast Furniture Systems Integration Sound Absorption Panels www.ram68.com</p>
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# KOLESAR

(continued from page 1)

eral years. The experiences and findings at WWFD are an explicit part of the FCC's NPRM text, and its project continues to produce insights that are likely to be of benefit to other broadcasters.

Kolesar is transmitter engineer for WTOP(FM), Federal News Radio as heard on WFED(AM), and WWFD. He also is program director of The Gamut, the format broadcast on WWFD. Prior to Hubbard, he worked as an electronics engineer in the Information Technology Division of the U.S. Naval Research Laboratory. He holds Master of Electrical Engineering and Bachelor of Science in Physics degrees, both from Catholic University.

We talked with him in late November.

**Radio World:** What brought you into radio engineering?

**Kolesar:** It goes all the way back to when I was five or six years old, when my parents bought me one of those Radio Shack AM broadcast station kits. I put it together and it was magic.

I borrowed my older sister's record player and her stack of 45s, and I would torture my parents playing DJ and making them listen to me on the radio.

Growing up in the D.C. area and listening to some of the big radio personalities in the 1980s, I was inspired by all of this. I ended up teaching myself electronics to build bigger studios and bigger transmitters. By the time I was 13, I put on the air this little radio station out of my bedroom. We'll call it Part 15 and a half.

I started a campus radio station in high school. I was the engineer of our college radio station. I went to Catholic University in northeast D.C. I kept my station. In college, I took my little hobby venture online and I kept running that even throughout my career.

I tried to get a real job. I worked for the Naval Research Lab for five years as an electronics engineer after grad school, and I still kept my hobby going online. When a job opening at WTOP appeared, I decided to finally give a shot of unifying my hobby and my career. I started working part-time at WTOP; in 2006 I started working full-time.

Then my career life took another random direction in 2011 when WTOP was



For Kolesar, a key selling point of digital is that "it puts AM in the ecosystem of digital audio delivery into the dashboard." Here, WWFD "The Gamut" is displayed on the HD Radio receiver of a 2019 Toyota Highlander.

sold from Bonneville to Hubbard. The HD3 station on WTOP, which had been, by corporate edict, airing the Mormon Channel, went silent. Joel Oxley, the GM of WTOP, suggested that we put my own internet radio station on the HD3, and that's how The Gamut was born.

Eventually it got put on 820 [kHz], so having control of that station, it became easy for me to suggest digital on it.

**RW:** There must have been a day when you said to somebody, "Hey, I've got this idea. Let's turn off the analog and try out all-digital." Most AM owners aren't going to jump at that.

**Kolesar:** What made the conversation easier was the fact that we had gotten an FM translator for the station. I think it was about Christmas-time 2016. I knew the translator was coming. At a lot of other stations, as soon as they get the translator, especially a music station, listenership migrates immediately to the FM translator, making the AM station little more than a legal justification to put this low-power FM signal on the air.

Knowing that this was in the future of that signal. I thought, "Well, what can we do to make this more than just a legal justification? What can we do to actually have the station add value in the quest for listeners? How can you make this valuable?"

Around 2008 or 2009, I'd heard the MA3 tests that iBiquity was running on 1670 on its experimental station, which was diplexed with WWFD. I was already privy to firsthand knowledge of how MA3 could sound and how robust it was and how well it covered.

The thought occurred to me, well, why don't we just try that; that way we could use our FM signal and tell people that, "Hey, you know, we've got this AM station. When you start to lose reception, flip back to 820 and listen to the station for another 30 or 40 miles while you're driving."

And I've told people before how I went to the CES in 2017 and approached

the Xperi booth.

In order to sell it to management, the process was not as difficult as I'd anticipated, because the FM translator

seriously reduced the risk of a digital conversion. Also WWFD is not one of the main signals in the Hubbard D.C. market. It's up in Frederick; I guess you could say it was never going to be a big moneymaker anyways. It was easier for Hubbard to say, "Let's take the risk on this smaller asset and see if you can make something of it." I wasn't going to convince Hubbard to do it on a 50 kilowatt AM signal first.

I should stress that I've been working extensively with Mike Raide at Xperi Corp., who having worked with MA3 himself, didn't need convincing that this was a great idea. All of these digital AM efforts wouldn't have happened without him.

**RW:** Somebody who runs an AM station will want to know how good it can sound.

**Kolesar:** An honest assessment, it can sound as good as the best FM HD2 sig-

(continued on page 26)



The basement studio of what Kolesar, right, calls his "Part 15 and a half" station in 1999, operating by then online. He is with co-host Brennan Kuhns. "Most of the people who passed through the station were musicians, performing live on the weekly Friday night show and causing the show to become a focal point in the local music scene in Prince George's County, Md. The Gamut on WTOP HD3 and WWFD is a direct descendant of this station."



Kolesar did some work at the High Frequency Active Auroral Research Program (HAARP) site in Gakona, Alaska. Early warning radar that shuts down the transmitters when a nearby plane is detected is to the right, with the array in the background.







# RADIOWORLD



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Kintronic Labs want to congratulate Dave Kolesar for his dedicated engineering leadership in bringing to reality the first all-digital AM station in the US market.



Congratulations, Dave, on your receipt of this well-deserved award. We join the industry in saluting you for your contributions to the broadcast engineering profession.



A highly-deserved recognition of efforts that knit together multiple disciplines and resources to further the "art" of broadcasting and give hope for the future of the AM band. Congratulations!



Dave Kolesar's commitment to innovation, not only to AM digital but to our industry as a whole, is truly exceptional and always has been. We are beyond fortunate to have such a pioneer work with Hubbard.

On behalf of all of us at Wheatstone, we extend our congratulations on receiving this distinguished award and join the rest of the industry in recognizing the revolutionary contributions you have made for the broadcast engineering community.



Congratulations on this well-deserved recognition, Dave! We thank you for all that you do for this great industry and for being a leader in broadcast engineering.



Great changes in broadcast have happened when technologists push our industry in new and forward-looking directions. Your work is part of a great tradition.



## KOLESAR

(continued from page 24)

nal that you've ever heard. The bitrate for the digital signal is about 40 kilobits, and so that's about equivalent to probably one of the higher-quality HD2 signals. And with proper audio processing, you can make that sound just as good as an analog FM.

It's got frequency response out to 15 kilohertz; it's stereo; you have title, artist and album metadata, as well as images such as station logo and album artwork. So not only do you have aural parity with everything else that you might find in a car dashboard, you have visual parity as well.

**RW:** *The FCC has opened an NPRM now.*

**Kolesar:** I think that it was very wise of the FCC to act quickly on the NPRM. The analog AM audience is not getting any bigger. AM is in a bit of a race against time to reinvent itself before, quite frankly, at least in many areas of the country, it's forgotten. AM is battling for relevance right now.

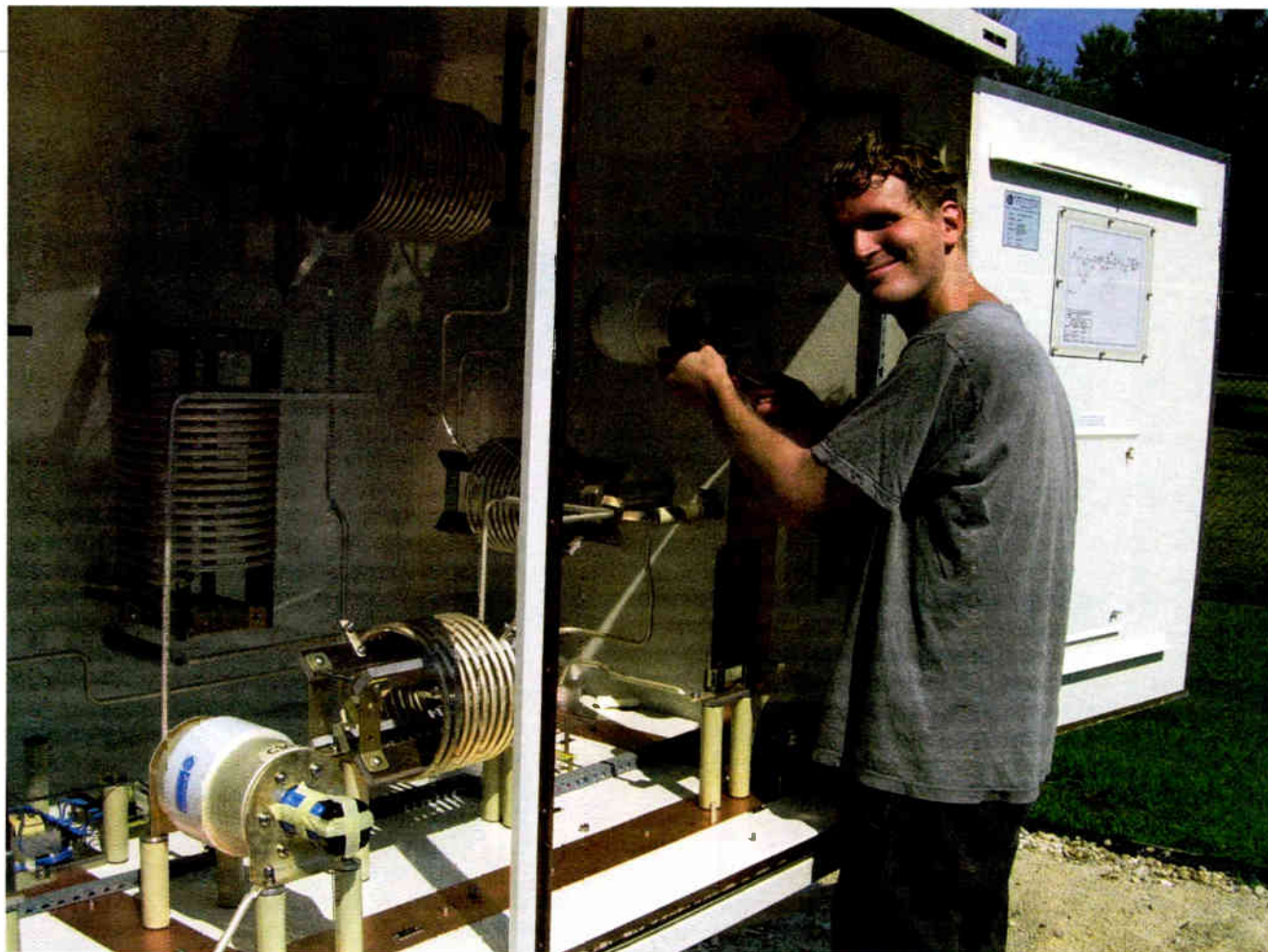
Everybody will say content is the problem or content is key, and that's absolutely true; but the medium itself limits what kind of content can go on it. As a result, AM is at a competitive disadvantage, it's only conducive to certain types of programming.

All-digital AM erases that disadvantage; any kind of programming that you could put on FM or even a streaming broadcast or a satellite broadcast can be put on an AM station with digital.

**RW:** *Do you see a day when this dramatically revitalizes the band, because suddenly AM stations sound a lot better, and big-market stations would start to consider doing it? The answer clearly involves receiver availability, but is there a big-picture upside, or is this more sort of a holding strategy?*

**Kolesar:** Let me tell you where I think receiver design is going. Most terrestrial broadcasts are listened to in vehicle. so we need to talk about what the car radio of the future is going to look like.

Receiver design is trending towards tuning by visual metadata. You're going to see receivers that scan the bands and will display the content available in the area as thumbnail icons on a screen.



Installation of a new phasor for WFED in 2008.

You see the programming that's available to you, then you'll see a bunch of station logos. You press the button and you hear programming that is available in your area. Now that programming could be on AM. FM, it could be a satellite program, it could be a stream that you have bookmarked. It won't necessarily be obvious; it's just content; but it has to be digital content in order for the receiver to display that metadata.

The way that you're listening to an audio program in the car won't necessarily be inherently obvious; it's just that digital AM is going to be one solution "under the hood," to get local content to receivers. It puts AM in the ecosystem of digital audio delivery into the dashboard. People aren't necessarily going to say, "I listen to AM radio," it's just yet another way of delivering content.

Since we've got all of this broadcast infrastructure in the United States already built for medium-wave transmission, this is a great way to bring it up to date and to keep it relevant in the car. That is what I see as the end game. It will probably go that way with or without AM; this is just a way of making sure that AM is part of that solution.

I imagine there's going to be a number of stations who see a competitive advantage to going digital early on, stations frankly with not as much to lose; and they will build, like WWFD is building, a new audience from scratch.

Then as people start listening to those services, the bigger stations will take note. Probably the last stations to convert will be the established legacy stations with significant analog audiences.

Right now about 25% of cars on the road are capable of receiving HD Radio. As the program director of a triple A station on AM, I would rather take my chances with that 25% than with the 100% who could get it but would refuse to because of quality.

**RW:** *What question do you hear the most from industry colleagues?*

**Kolesar:** The biggest concern is receiver penetration right now, because an AM station with a substantial analog audience is going to take a look at the 25% number in the car and say that's not good enough to switch. If they have an established audience, they may want to wait a few years.

Over half the cars being sold now have HD built into them, and that number is going to continue to go up, so both through attrition and new sales, the percentage of cars with HD Radios are going to increase. For an established analog player, it becomes a waiting game of at what point would you switch over and perhaps even gain a new audience from people who are willing to hear your programming in higher quality.

Receiver penetration numbers are good enough for new players; established players would probably want to wait a little bit.



Dave Kolesar and his husband Patrick Wojahn visit the WSM transmitter site on a 2013 visit to Tennessee. Note base insulator in rear. Challenging convention is not something new for Kolesar; in 2006 he was among several people represented by the ACLU and Equality Maryland in a marriage equality case considered a landmark in efforts to assure same-sex couples the right to marry.



Onsite in 2008.

**RW:** What would a typical station expect to spend to update their facilities?

**Kolesar:** There's two pieces to look at. There's your antenna system and there are the transmitters. If you've maintained your antenna system and you have a new transmitter or one that's capable of all-digital operation, your costs of going digital could be very minimal. If you have to do a complete site rehabilitation, you might be spending tens of thousands of dollars, and you might be talking about buying a new transmitter. If you're a 50 kilowatt AM, that's well over \$100,000.

I ask people, "Have you done the hybrid mode of HD in the past? If you have, then your antenna system is already compliant for MA3 operation, so you likely will not have to do anything with your antenna system." Then

I ask what kind of transmitter they have. If you've got an old tube rig, you're going to have to buy a new transmitter. If you have something like a Harris DX series, a Nautel NX series or even an XR series, chances are your transmitter is ready or could be easily modified. It really depends on what kind of shape your antenna system is in and what kind of transmitter you have.

**RW:** If the FCC acts quickly and makes it optionally available to everybody, how many stations would switch?

**Kolesar:** I truly do not know. You'll probably see a number of smaller stations, maybe Class B and C stations with translators, switch relatively quickly.

A number of stations have approached Xperi and me about converting; the stickler is the fact that an experimental is required. Informally we could prob-

ably say that the FCC, looking to further the art of AM broadcasting, would be inclined to renew an experimental for MA3 operation; but a station owner may not want to make an investment in something that could be taken away in a year.

**RW:** Is it going to add a lot of interference on the band and make noise even worse?

**Kolesar:** I don't believe so. Remember, these digital stations are living in the analog allocations world. They still have to meet the same emissions mask, they still have to meet the same power levels, they still have to abide by the same protection scheme.

I can just relay my qualitative experiences with WWFD. For instance, in our nighttime interference-free (NIF) contour, when we were analog, you couldn't listen to adjacent-channel stations, 810 and 830, because of modulation splatter. When we went digital, all of a sudden you can hear 810 and 830 — not perfectly, because you hear the digital hiss underneath these stations, but the digital-to-analog interference, at least to my ear, is more palatable because it just comes across as background static rather than a splatter that would ruin intelligibility. My personal experience has been that digital-to-analog interference is not as severe as analog-to-analog interference.

**RW:** Closing thoughts?

**Kolesar:** I think MA1, the hybrid mode of HD Radio, did a disservice to MA3, because MA1 doesn't work well. At best MA1 is a compromise. It compromises the analog and it certainly compromises the digital. So people have based their perceptions and have hardened their opinions about digital AM based on

their experiences with the hybrid mode. In that sense hybrid has done a disservice to the potential of a digital transition for AM.

The MA3 mode of HD Radio is much more robust because all the power goes into the digital carriers rather than the digital carriers being 30 dB down from the analog signal, as it is in the hybrid.

You have better sound quality. Even though the bitrates are somewhat comparable, the sound quality in MA3 in general is so much better because you can process it specifically for a low-bit rate digital stream; in the hybrid mode you have to process the digital signal similar to how you would process an analog AM signal, so that it would be an easy transition on the ear between analog and digital, and as a result the digital didn't sound nearly as good because a lot of stations processed their digital portion of the hybrid signal too aggressively. The codec didn't have that many bits to work with, and it ended up sounding muddy, whereas in this case you really can approach FM-like sound quality with the all-digital mode.

In summary, the hybrid mode did a disservice to the all-digital mode. And now there's a bit of re-education that has to go on in terms of selling people on the notion of digital AM.

Comment on this or any story to radioworld@futurenet.com.

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# America's Broadcasters Should Look Like America

Commissioner Starks says the FCC has, over decades, failed to meet its obligation

## NEWSMAKER

FCC Commissioner Geoffrey Starks spoke in December at the Media Institute "Free Speech America" Gala. He addressed issues involving freedom of speech as well as diversity in broadcast ownership and hiring. His text:

### THE FIRST AMENDMENT

The need has always been clear: for free men and women to commit to the ideals of liberty and self-determination, they must be well-informed. A free press is the sentinel of our democracy. On this score, perhaps the greatest observer, and the greatest account, is Alexis de Tocqueville in "Democracy in America." He writes: "The sovereignty of the people and the liberty of the press may therefore be looked upon as correlative institutions; just as the censorship of the press and universal suffrage are two things which are irreconcilably opposed, and which cannot long be retained among the

institutions of the same people."

In our current moment, perhaps more than ever, the need for a robust, independent free press has never been more critical.

Today, there is an overload of information. It can be difficult to discern what is true, what is not; what are facts, and what are not; what is worthy to be called news, and what is not. And just as the promise of the First Amendment supported the free exchange of ideas in the age of typewriters and telegraphs, it continues to do so in today's era of broadband and network broadcasting. Social media, deep fakes and the barrage of information that comes to each of us through the internet are potent new influences upon our democracy that admonish us to develop new responsive interpretive muscles.

But part of this hearkens back to the era of our nation's founding. In the 1830s, Tocqueville wrote that "[t]he number of periodical and occasional publications in the United States actu-

ally surpasses belief." The American people have a deeply ingrained urge to seek out and wade through what the Supreme Court has called a "multiplicity of information."

That's a good thing because it is essential to our democracy that the American people go through the process of hearing from a wide range of sources, ideologies and viewpoints. The fabric of our shared culture has long understood how to make decisions in the midst of this fog. Democracy is inherently curious and competitive, which is why we often speak of our culture as the product of a marketplace of ideas.

Like all markets, the one of ideas rises and falls upon the quality and depth of information. As they say, "Garbage in, garbage out." What we need, then, is a press that pursues unvarnished facts and, above all else, truth.

### MEDIA DIVERSITY

The rights enshrined in the First Amendment, including freedom of speech and freedom of the press, guide the Federal Communications Commission's public interest standard, which must inform everything that we



Commissioner Geoffrey Starks at The Media Institute's "Free Speech America" Gala in Washington in December.

do. But the fact that those celebrated words were written into the Bill of Rights does not, in and of itself, guarantee that it will work as intended. The First Amendment is not self-executing. Preserving its guarantees requires the vigilance of regulators, the media, and the public alike.

(continued on page 30)

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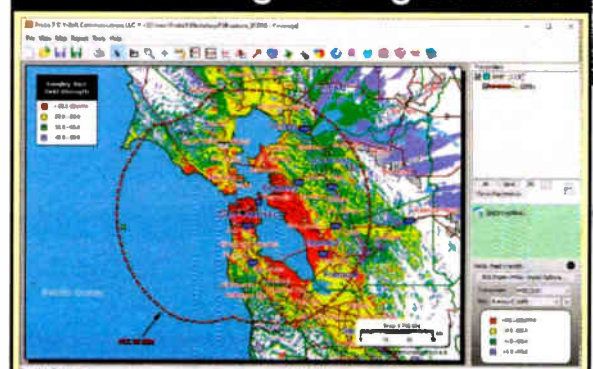
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I'm looking for KFRC radio special of Elvis Presley which aired on January 8, 1978. I'd be willing to pay for a digital copy. Ron, 925-284-5428.

I'm looking for KTIM, AM, FM radio shows from 1971-1988. The stations were located in San Rafael, Ca. Ron, 925-284-5428.

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Looking for a broadcast excerpt of a San Francisco Giant's taped off of KSFO radio from 1959, interviews with Willie Mays, Dusty Rhodes & some play by play excerpts, also features a homerun by Willie Mays and Felipe Alou stealing second base, running time is 18:02, also looking for SF Giants games and/or highlights from 1958-1978 also taped off KSFO Radio. Ron, 925-284-5428 or [ronwtamm@yahoo.com](mailto:ronwtamm@yahoo.com).

Looking for KFRC signoff radio broadcast from 1930 Andy Potter, running time is 0:22 & also the KLX kitchen the program guest is Susanne Caygill, a discussion of women's affairs with a long promotion for Caygill's appearance at a local store. Anne Truax, Susanne Caygill, running time is 13:44. Ron, 925-284-5428 or email [ronwtamm@yahoo.com](mailto:ronwtamm@yahoo.com).

Looking for KSFX radio shows, Disco 104 FM, 1975-1978. R Tamm, 925-284-5428.

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# STARKS

(continued from page 28)

Ida B. Wells once said: “The people must know before they can act, and there is no educator to compare with the press.” For its part, the FCC has an incredibly important role to play in supporting the First Amendment and preserving the freedoms it affirms.

Namely, the FCC, by statute, is tasked with facilitating greater diversity in our national discourse. As the Supreme Court has stated, when considering the First Amendment, “the widest possible dissemination of information from diverse and antagonistic sources is essential to the welfare of the public.”

Those in the media are both the beneficiaries and the guarantors of our First Amendment rights. They have the power to inform, to educate and to impact the way we view ourselves and the world. Where we strengthen our media, we strengthen our national conversation and reaffirm our freedom of speech at the same time.

The FCC, which governs our communications networks, has a critical

role to play in securing and protecting public access to information. One of the many roles the law assigns to the commission is licensing broadcasters to use our public airwaves. In doing so, our controlling statute demands that we distribute these licenses in a way that prevents too many from winding up in the same hands and promotes ownership by women and people of color.

This is important. The capacity of broadcast media to empower and inform is indisputable, and it is critical that those exercising this power represent all of us, not a mere privileged or anointed few. Eighty-six percent of Americans get their local news from local TV stations, while only 23% get their local

news from sources that are exclusively online. And numerous studies suggest that most of the news consumed online is originated by traditional sources, like broadcasters or newspapers.

Of particular concern to me, then, is the persistent lack of diversity in broadcast media ownership, and among its rank and file.

America’s broadcasters should look like America. Ownership sets the tone for a media outlet, and employees manage its day-to-day operations and provide its public face. Given the crucial role our media plays in informing the public, it is critical that it reflect the nation at large, both behind and in front of the camera, and that our local media also be reflective of the local communities it is bound to serve. These institutions should mirror the richness of our population and give expression to its diverse voices.

The need for a greater focus on diversity and inclusion has never been more apparent, and the commission has, largely and over many decades, failed in meeting its statutory goals and obligations in this regard.

This isn’t conjecture or political posturing. It isn’t even an opinion. It is a fact borne out by our data.

The FCC’s numbers on broadcast ownership are collected every two years. The latest dataset was released in 2017. According to our most recent data, there are more than 1,300 full-power television stations licensed across the country, with only 12 owned by African Americans. If you were rounding, that would be closer to zero percent than 1% — and this has been so for a long, long time.

## OPPORTUNITY

However, now we may finally have a chance to get this right.

The FCC has been given a golden opportunity to succeed where it has previously fallen flat. As the Third Circuit Court of Appeals observed in its most recent media ownership decision, *Prometheus v. FCC*, the commission can and must do better in addressing the impact of its regulatory efforts on the ability of women and people of color to own stations. No longer can it rely on bad data and analysis while ignoring its obligations. The court sent back the FCC’s latest deregulatory efforts and demanded that we get the data and perform the analysis necessary to ensure

that we are fully meeting our statutory requirements. [In November, the FCC, led by Chairman Ajit Pai, filed an appeal of the decision vacating the FCC’s media ownership rules. — Ed.]

Beyond ownership, the commission must redouble its Equal Employment Opportunity efforts to ensure that broadcasters are seeking diverse employees. For 15 years, the commission has had an open rulemaking proposing to continue a decades old data collection on the diversity of the broadcast workforce. And for 15 years, while we’ve been stuck in neutral, we’ve elicited zero visibility on whether station management and news teams reflect our communities. We cannot fully engage on this issue when our ability to understand the problem is compromised.

On both counts, when it comes to ownership and employment, there are those that would argue that collecting data or adopting meaningful policies to promote diversity would be unconstitutional. I couldn’t disagree more.

First, collecting and analyzing data is a core function of an expert agency, and having a better understanding of the industries that we regulate is also just common sense.

Second, when it comes to designing programs that would help improve our stagnant and declining ownership numbers, we can target our efforts based on race, ethnicity and gender, so long as we are careful and provide a well-supported reason for doing so. The Third Circuit Court has instructed us to do so. Given the historic problems we’ve had with broadcast diversity, new research like disparity studies identifying past discrimination in licensing, could be critical to both addressing the concerns of the Third Circuit and finally making good policy in this space.

So, we must get this right. We must do better in fulfilling our statutory obligation to promote diversity in broadcasting. And we must support the inclusion of marginalized voices in the national conversation. Only then can we claim to have upheld our responsibilities under our statute and secured the guarantees of First Amendment in the field of broadcasting.

*Geoffrey Starks, a Democrat, was nominated by President Trump to the FCC seat formerly held by Mignon Clyburn. He was sworn in in January 2019.*



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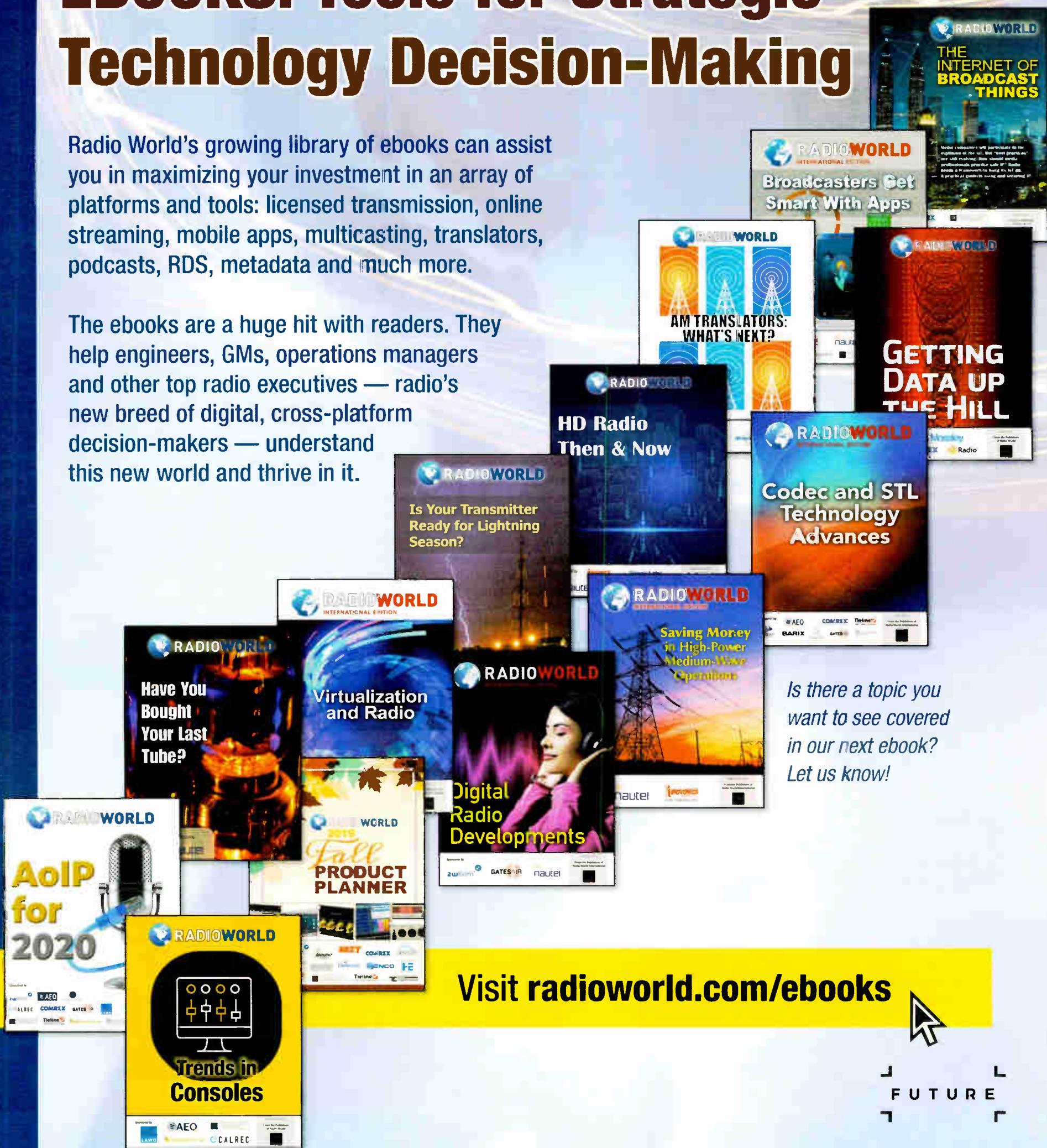
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